



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,183	02/12/2004	Hong-kyun Yim	Q79872	3083

23373 7590 01/12/2007
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

OSORIO, RICARDO

ART UNIT	PAPER NUMBER
----------	--------------

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/776,183

Applicant(s)

YIM, HONG-KYUN

Examiner

RICARDO L. OSORIO

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 and 14 is/are rejected.
- 7) ☒ Claim(s) 13, 15, and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoi (5,168,429) in view of Ishida (5,949,565).

Regarding claims 7, 10, and 11, Hosoi teaches a portable electronic apparatus having a flat panel display unit removably attached thereto (col. 1, lines 14-18), a portable computer comprising a body 3 having connection section portion 19 (see Fig. 1, col. 3, lines 31-40), a display member 17 that is detachably installed with respect to the body 3 (Fig. 4, and col. 1, lines 14-18), a pair of rotation pins (rotary shafts 47 and slide pawls 55) that are rotatably the connection section 19 (Fig. 5, and col. 4, lines 22-28), fixing brackets by teaching fixing portions 117 and coil springs 115 wherein the unit body 111 includes a pair of spring fixing portions 117 for fixing one end of the respective coil springs 115, and a pair of guiding grooves 59 and stopper grooves 60, continuous with the guiding grooves 59, formed therein such that respective slide shafts 113 having a spring fixing portion 121 for fixing the other end of the coil spring 115, and includes the rectangular hole 119 for allowing the slide knobs 61 to be operative in a direction indicated by an arrow B (see col. 5, lines 22-34 and Figs. 7 and 8), a means for maintaining connection to define a locking means by teaching how the display unit 5 is fixed in an arbitrary position between different positions wherein the rotary shaft 47 includes a shaft body 125 in which an

Art Unit: 2629

insertion hole 124 is formed, a shaft holder 127 for fixing the rotary shaft 47 to the top cover 11, a coil spring 129 wound on the shaft body 125, a stopper 131 of the coil spring 129 (Fig. 12, and col. 6, lines 9-16), and a means for canceling the connection between fixing brackets and rotation to define an unlocking means by teaching how the display unit 5 is released when the engagement between the slide pawl 55 and the rotary shaft 47 is released (col. 6, lines 17-30 and Fig. 13).

However, Hosoi does not teach a light receiving module in said display receiving said picture signal as light emitted from said light emitting module.

Ishida teaches a light receiving element 48 that is mounted in display member 21 to receive an image signal as light emitted from said light emitting element 47 when the display member 21 is mounted on the body 2 (see col. 5, line 55-col. 6, line 10, and Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art to combine Hosoi and Ishida's inventions because while Hosoi teaches a display member 17 that is detachably installed with respect to the body 3 by means of a display connector, Ishida teaches how the portable device enables an image signal to be carried as light from the light emitting module. The motivation for combining these inventions would have been to minimize or eliminate the wirings between the apparatus body and the display unit, so that the image signals can be sent to the display unit in a cordless manner (col. 3, lines 4-7).

Regarding claim 8, further, Hosoi teaches a pair of latch grooves 31 for engaging the latch pawls 21 which are formed at the front end portion of the front top 25, and an opening 33 for exposing the keyboard 13 is formed in the central portion thereof (col. 3, lines 49-53, and Fig. 3), a pair of guiding grooves 59 and stopper grooves 60, continuous with the guiding grooves, formed in the front surface 53 that are provided in the guiding grooves, slide knobs 61 connected to the slide pawls 55 for effecting a slide operation between a third position for allowing the slide pawls to be projected from the slide pawl hole 5b in the outside surfaces 49 to engage them with the rotary shafts 47 and a fourth position for allowing the slide pawls to be drawn or pulled into the outside surfaces to release the engagement with the rotary shafts 47 (col. 4, lines 31-41, and Fig. 5).

Regarding claim 9, Further, Hosoi teaches a connector hole 35 for exposing a connector on the body side being formed in the central portion of the center top 27 (col. 3, lines 53-55, and Fig. 3),

Art Unit: 2629

and a means for canceling the connection between fixing brackets and rotation to define an unlocking means by teaching how the display unit is released when the engagement between the slide pawl 55 and the rotary shaft 47 is released (col. 6, lines 17-30, and Fig. 13).

Regarding claim 12, further, Hosoi teaches a pair of latch grooves 31 for engaging the latch pawls 21 which are formed at the front end portion of the front top 25, and an opening 33 for exposing the keyboard 13 is formed in the central portion thereof (col. 3, lines 49-53 and Fig. 13).

Regarding claim 14, although not specifically taught in either Hosoi and Ishida, it is well known to someone of ordinary skill in the art of light emission and reception to use a photo diode as a light receiver and to use a laser diode, or an LED, as a light emitter.

Allowable Subject Matter

3. Claims 13, 15, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive. Applicant argues that "if one were to modify Hosoi to include the light transmitting/receiving elements 47 and 48 of Ishida, they would make the combination in accordance with Ishida's teachings, which is to provide Hosoi with light transmitting/receiving elements in the form of a hinge. However, this configuration in Ishida is not disconnectable - which is completely opposite to that required by Hosoi".

Examiner disagrees because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the

Art Unit: 2629

test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 571-272-7676. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 571-272-7681.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2629

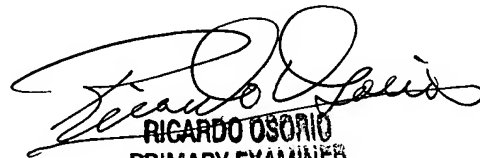
or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology Division: 2629

RLO
January 6, 2007



RICARDO OSORIO
PRIMARY EXAMINER